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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/081,535	02/25/2002	Yukiko Takeda	500.41227X00	4269

24956 7590 11/10/2005

MATTINGLY, STANGER, MALUR & BRUNDIDGE, P.C.
1800 DIAGONAL ROAD
SUITE 370
ALEXANDRIA, VA 22314

EXAMINER	
VAUGHN JR, WILLIAM C	

ART UNIT	PAPER NUMBER
2143	

DATE MAILED: 11/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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APPLICATION NUMBER	FILING DATE	FIRST NAMED APPLICANT	ATTORNEY DOCKET NO.
10/094,535			

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Vaughn	
ART UNIT	PAPER NUMBER
2143	

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INTERVIEW SUMMARY

All participants (applicant, applicant's representative, PTO personnel):

(1) William Vaughn, Primary Examiner (3) SHUN HARA,

(2) CARL BRUNDIDGE Reg. No. 29,621 (4)

Date of Interview 10/27/05

Type: ☐ Telephonic ☐ Personal (copy is given to ☐ applicant ☑ applicant's representative).

Exhibit shown or demonstration conducted: ☑ Yes ☐ No If yes, brief description: Agenda

Agreement ☐ was reached. ☒ was not reached.

Claim(s) discussed: 1

Identification of prior art discussed: U.S. Patent Nos. 6,118,784 USPGPUB 2002/0138622

Description of the general nature of what was agreed to if an agreement was reached, or any other comments: Discussion regarding Proposed amendment as well as the rejection utilized in rejection of the claims. Proposed amendment overcomes the present rejection. Examiner indicated that further evaluation of the prior art would need to be done.

(A fuller description, if necessary, and a copy of the amendments, if available, which the examiner agreed would render the claims allowable must be attached. Also, where no copy of the amendments which would render the claims allowable is available, a summary thereof must be attached.)

1. ☒ It is not necessary for applicant to provide a separate record of the substance of the interview.

Unless the paragraph above has been checked to indicate to the contrary. A FORMAL WRITTEN RESPONSE TO THE LAST OFFICE ACTION IS NOT WAIVED AND MUST INCLUDE THE SUBSTANCE OF THE INTERVIEW. (See MPEP Section 713.04). If a response to the last Office action has are ready been filed, APPLICANT IS GIVEN ONE MONTH FROM THIS INTERVIEW DATE TO FILE A STATEMENT OF THE SUBSTANCE OF THE INTERVIEW.

2. ☐ Since the Examiner's interview summary above (including any attachments) reflects a complete response to each of the objections, rejections and requirements that may be present in the last Office action, and since the claims are now allowable, this completed form is considered to fulfill the response requirements of the last Office action. Applicant is not relieved from providing a separate record of the interview unless box 1 above is also checked.

Examiner Note: You must sign this form unless it is an attachment to another form.

FORM PTOL-413 (REV.1-96)

WILLIAM C. VAUGHN, JR.
PRIMARY EXAMINER

Manual of Patent Examining Procedure, Section 713.04 Substance of Interview must Be Made of Record

A complete written statement as to the substance of any face-to-face or telephone interview with regard to an application must be made of record in the application, whether or not an agreement with the examiner was reached at the interview.

§1.133 Interviews

* * * * *

(b) In every instance where reconsideration is requested in view of an interview with an examiner, a complete written statement of the reasons presented at the interview as warranting favorable action must be filed by the applicant. An interview does not remove the necessity for response to Office action as specified in §§ 1.111,1.135. (35 U.S.C.132)

§ 1.2. Business to be transacted in writing. All business with the Patent or Trademark Office should be transacted in writing. The personal attendance of applicants or their attorneys or agents at the Patent and Trademark Office is unnecessary. The action of the Patent and Trademark Office will be based exclusively on the written record in the Office. No attention will be paid to any alleged oral promise, stipulation, or understanding in relation to which there is disagreement or doubt.

The action of the Patent and Trademark Office cannot be based exclusively on the written record in the Office if that record is itself incomplete through the failure to record the substance of interviews.

It is the responsibility of the applicant or the attorney or agent to make the substance of an interview of record in the application file, unless the examiner indicates he or she will do so. It is the examiner's responsibility to see that such a record is made and to correct material inaccuracies which bear directly on the question of patentability.

Examiners must complete a two-sheet carbon interleaf Interview Summary Form for each interview held after January 1, 1978 where a matter of substance has been discussed during the interview by checking the appropriate boxes and filling in the blanks in neat handwritten form using a ball point pen. Discussions regarding only procedural matters, directed solely to restriction requirements for which interview recordation is otherwise provided for in Section 812.01 of the Manual of Patent Examining Procedure, or pointing out typographical errors or unreadable script in Office actions or the like, are excluded from the interview recordation procedures below.

The Interview Summary Form shall be given an appropriate paper number, placed in the right hand portion of the file, and listed on the "Contents" list on the file wrapper. The docket and serial register cards need not be updated to reflect interviews. In a personal interview, the duplicate copy of the Form is removed and given to the applicant (or attorney or agent) at the conclusion of the interview. In the case of a telephonic interview, the copy is mailed to the applicant's correspondence address either with or prior to the next official communication. If additional correspondence from the examiner is not likely before an allowance or if other circumstances dictate, the Form should be mailed promptly after the telephonic interview rather than with the next official communication.

The Form provides for recordation of the following information:

- Serial Number of the application
- Name of applicant
- Name of examiner
- Date of interview
- Type of interview (personal or telephonic)
- Name of participant(s)) (applicant, attorney or agent, etc.)
- An indication whether or not an exhibit was shown or a demonstration conducted
- An identification of the claims discussed
- An identification of the specific prior art discussed
- An indication whether an agreement was reached and if so, a description of the general nature of the agreement (may be by attachment of a copy of amendments or claims agreed as being allowable). (Agreements as to allowability are tentative and do not restrict further action by the examiner to the contrary.)
- The signature of the examiner who conducted the interview
- Names of other Patent and Trademark Office personnel present.

The Form also contains a statement reminding the applicant of his responsibility to record the substance of the interview.

It is desireable that the examiner orally remind the applicant of his obligation to record the substance of the interview in each case unless both applicant and examiner agree that the examiner will record same. Where the examiner agrees to record the substance of the interview, or when it is adequately recorded on the Form or in an attachment to the Form, the examiner should check a box at the bottom of the Form informing the applicant that he need not supplement the Form by submitting a separate record of the substance of the interview.

It should be noted, however, that the Interview Summary Form will not normally be considered a complete and proper recordation of the interview unless it includes, or is supplemented by the applicant or the examiner to include, all of the applicable items required below concerning the substance of the interview:

A complete and proper recordation of the substance of any interview should include at least the following applicable items:

1) A brief description of the nature of any exhibit shown or any demonstration conducted,
2) an identification of the claims discussed,
3) an identification of specific prior art discussed,
4) an identification of the principal proposed amendments of a substantive nature discussed, unless these are already described on the Interview Summary Form completed by the examiner,
5) a brief identification of the general thrust of the principal arguments presented to the examiner. The identification of arguments need not be lengthy or elaborate. A verbatim or highly detailed description of the arguments is not required. The identification of the arguments is sufficient if the general nature or thrust of the principal arguments made to the examiner can be understood in the context of the application file. Of course, the applicant may desire to emphasize and fully describe those arguments which he feels were or might be persuasive to the examiner,
6) a general indication of any other pertinent matters discussed, and
7) if appropriate, the general results or outcome of the interview unless already described in the Interview Stimmary Form completed by the examiner.

Examiners are expected to carefully review the applicant's record of the substance of an interview. If the record is not complete or accurate, the examiner will give the applicant one month from the date of the notifying letter or the remainder of any period for response, whichever is longer, to complete the response and thereby avoid abandonment of the application (37 CFR 1.135(c)).

Examiner to Check for Accuracy

Applicant's summary of what took place at the interview should be carefully checked to determine the accuracy of any argument or statement attributed to the examiner during the interview. If there is an inaccuracy and it bears directly on the question of patentability, it should be pointed out in the next Office letter. If the claims are allowable for other reasons of record, the examiner should send a letter setting forth his or her version of the statement attributed to him. If the record is complete and accurate, the examiner should place the indication "Interview record OK" on the paper recording the substance of the interview along with the date and the examiner's initials.

*U.S. GPO: 1997-422-310/60005

SN 10/081,535 Ex VAUGHN

Agenda for the interview

1.Office Action(Final)

a) Claim 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsuchiya (US 6,118,784).

b) Claims 1-8 and 11-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsuchiya (US 6,118,784) in view of Dorenbosch (US 2002/0138622 A1).

2.Our Invention

a) Claim 1(& claim 4 of method for processing a message)

[Claim 1] An address translator for connecting a network A conforming to a addressing system P to a network B conforming to a addressing system Q, said address translator comprising:

an address translating function for translating an address conforming to the addressing system P to an address conforming to the addressing system Q, or vice versa; and

a detecting function for detecting a communication conforming to a particular protocol based on information on a destination, information on the destination and a port thereof, or information on the port of communication data,

wherein said address translator translates an address described in a first region of the communication data by said address translation function, and

when said address translator detects a communication conforming to said particular protocol, said address translator creates translation information including a correspondence relationship between addresses in the addressing system P and addresses in addressing system Q for translating an address described in a second region of the communication data.

b) Claim 2-3 (& claim 7 of method for processing a message)

[Claim 2-2] The address translator according to claim 2, wherein said address translator sends information in said second region of the communication data with the translation information, and said information in said second region comprises parameter which requires a translation.

[Claim 2-3] The address translator according to claim 2-2, wherein said address translator sends the information in said second region with a tag added to said parameter by said address translator,

wherein said server device extracts the parameter which requires a translation from the second region based on said tag.

c) Claim 3.5 (& claim 5.5 of method for processing a message)

[Claim 3.5] The address translator according to claim 1,

in case of that the addressing system P is IPv4, the addressing system Q is IPv6, and

in case of that the addressing system P is IPv6 and the addressing system Q is IPv4.

d) Claim 9

[Claim 9] An address translator connected to both a first network conforming to a first addressing system and a second network conforming to a second addressing system, said address

translator comprising:

a memory part for holding a translation rule for translating said first addressing system to said second addressing system, or vice versa;

a translating part for translating a first address in input information conforming to said first addressing system to a second address conforming to said second addressing system, or vice versa based on said translation rule; and

a function of outputting said input information and said translation rule.

3.Cited references

a) Tsuchiya

Tsuchiya discloses an address translator for translating an address conforming to the protocol P to an address conforming to the protocol Z, or vice versa (column 1 lines 47-58, column 5 lines 42-49).

b) Dorenbosch

Dorenbosch discloses translating IP addresses contained in the body of an SIP message (paragraph 0030).

4.Difference between our invention and cited references

a) Claim 1

Dorenbosch doesn't disclose "a detecting function for detecting a communication conforming to a particular protocol" as is one of characteristic points of our claim 1. Therefore Dorenbosch naturally does't disclose nor suggest "detecting based on information on a destination, information on the destination and a port thereof, or information on the port of communication data" as is one of characteristic points of our claim 1.

b) Claim 2-3

Dorenbosch doesn't disclose nor suggest "said address translator sends the information in said second region with a tag added to said parameter by said address translator,
wherein said server device extracts the parameter which requires a translation from the second region based on said tag

c) Claim 3.5

Tsuchiya only disclose translating IP header from v4/v6 to v6/v4 (column 1 lines 47-58, column 5 lines 42-49), Dorenbosch only disclose translating SIP message body from dynamic public address to long lived IP address(paragraph 0030).Therefore both of references don't disclose or suggest "translating a part of SIP message from v4/v6 to v6/v4".

d) Claim 9

Tsuchiya doesn't disclose "outputting said translation rule" as is one of characteristic points of our claim 9.

Claim amendments

What is claimed is:

1. An address translator for connecting a network A conforming to a [protocol] addressing system P to a network B conforming to a [protocol] addressing system Q, said address translator comprising:

an address translating function for translating an address conforming to the [protocol] addressing system P to an address conforming to the [protocol] addressing system Q, or vice versa; and

a detecting function for detecting a communication conforming to a particular protocol based on information on a destination, information on the destination and a port thereof, or information on the port of communication data,

wherein said address translator translates an address described in a first region of the communication data by said address translation function, and

when said address translator detects a communication conforming to said particular protocol, said address translator creates translation information including a correspondence relationship between addresses in the [protocol] addressing system P and addresses in [protocol] addressing system Q for translating an address described in a second region of the communication data.

2. [An] The address translator according to claim 1, further comprising communicating means for communicating with a server device,

wherein said address translator sends said translation information to said server device, and receives information including said second region which has been translated by said server device.

2-2. The address translator according to claim 2, wherein said address translator sends information in said second region of the communication data with the translation information, and said information in said second region comprises parameter which requires a translation.

2-3. The address translator according to claim 2-2, wherein said address translator sends the information in said second region with a tag added to said parameter by said address translator,

wherein said server device extracts the parameter which requires a translation from the second region based on said tag.

3. [An] The address translator according to claim 1,

further comprising a processing part for translating an address described in the second region of the communication data.

3.5. The address translator according to claim 1,

in case of that the addressing system P is IPv4, the addressing system Q is IPv6, and

in case of that the addressing system P is IPv6 and the addressing system Q is IPv4.

4. A method of processing a message including a first portion and a second portion, comprising:

first translation processing for translating information in the first part from information conforming to a first [protocol] addressing system to information conforming to a second [protocol] addressing system;

determination processing for determining whether or not the second portion requires a translation based on information on a destination, information on the destination and a port thereof, or information on the port of the message; and

second translation processing for translating information in the second portion, determined to require a translation, from information conforming to the first [protocol] addressing system to information conforming to the second [protocol] addressing system.

5. [A] The message processing method according to claim 4, further comprising:

using a first server and a second server;

performing said first translation processing in said first server;

transferring the information in said second portion from said first server to said second server;

said second server extracting a parameter which requires a translation from said second portion;

performing said second translation processing on said extracted parameter in said second server; and

transferring the information in said second portion which has undergone said second translation processing from said second server to said first server.

5.5. The message processing method according to claim 4, wherein

in case of that the first addressing system is IPv4, the second addressing system is IPv6, and

in case of that the first addressing system is IPv6, the second addressing system is IPv4.

5.6. The message processing method according to claim 4, wherein said first server sends information in said second portion with a translation information including a correspondence relationship between addresses in the first addressing system and addresses in second addressing system for translating an address in the second portion.

and said information in said second portion comprises parameter which requires a translation.

6. A message processing method according to claim 5, wherein:

said second server has a table indicative of parameters which require a translation, and extracts a parameter which requires a translation, and extracts a parameter which requires a translation from said second portion based on said table.

7. A message processing method according to claim 5, wherein:

said first server transfers the parameter which requires a translation together, with a tag added thereto, in said second portion to said second server, and

said second server extracts a parameter which requires a translation from said second portion based on said tag.

8. A message processing method according to claim 4, wherein said first portion is an IP header, said second portion is a payload including an SIP message, one of said first protocol and second protocol is IPv4, the other is IPv6, and information for translation is an address.

9. An address translator connected to both a first network conforming to a first addressing system and a second network conforming to a second addressing system, said address translator comprising:

a memory part for holding a translation rule for translating said first addressing system to said second addressing system, or vice versa;

a translating part for translating a first address in input information conforming to said first addressing system to a second address conforming to said second addressing system, or vice versa based on said translation rule; and

a function of outputting said input information and said translation rule.

10. An address translator according to claim 9, further comprising a function of receiving said input information having a translated address using said outputted input information and translation rule.

11. An address translator according to claim 10, further comprising a communication function for communicating with a server device,

wherein said address translator sends said input information to said server device, and receives said input information having an address translated by said server device.

12. An address translator according to claim 11, further comprising:

a function of detecting an SIP communication; and

a function of creating translation information including a correspondence relationship between an address in the first network conforming to the first addressing system and an address in the second network conforming to the second addressing

system, in association with said server device, when an SIP communication is detected.

13. An address translator according to claim 12, further comprising a function of detecting information for translation included in the SIP communication, and adding identification information to said information for translation.

14. An address translator according to claim 9, wherein the SIP communication is detected based on information on a destination, information on the destination and a port thereof, or information on the port.

15. An address translator according to claim 10, further comprising:

a processing part connected through an internal bus,

wherein said input information is sent to said processing part through said internal bus, and said input information having a protocol translated by said processing part is received through said internal bus.

16. In a communication network in which a network conforming to a protocol P and a network conforming to a protocol Q are interconnected through an address translator, a server device operative in cooperation with said address translator,

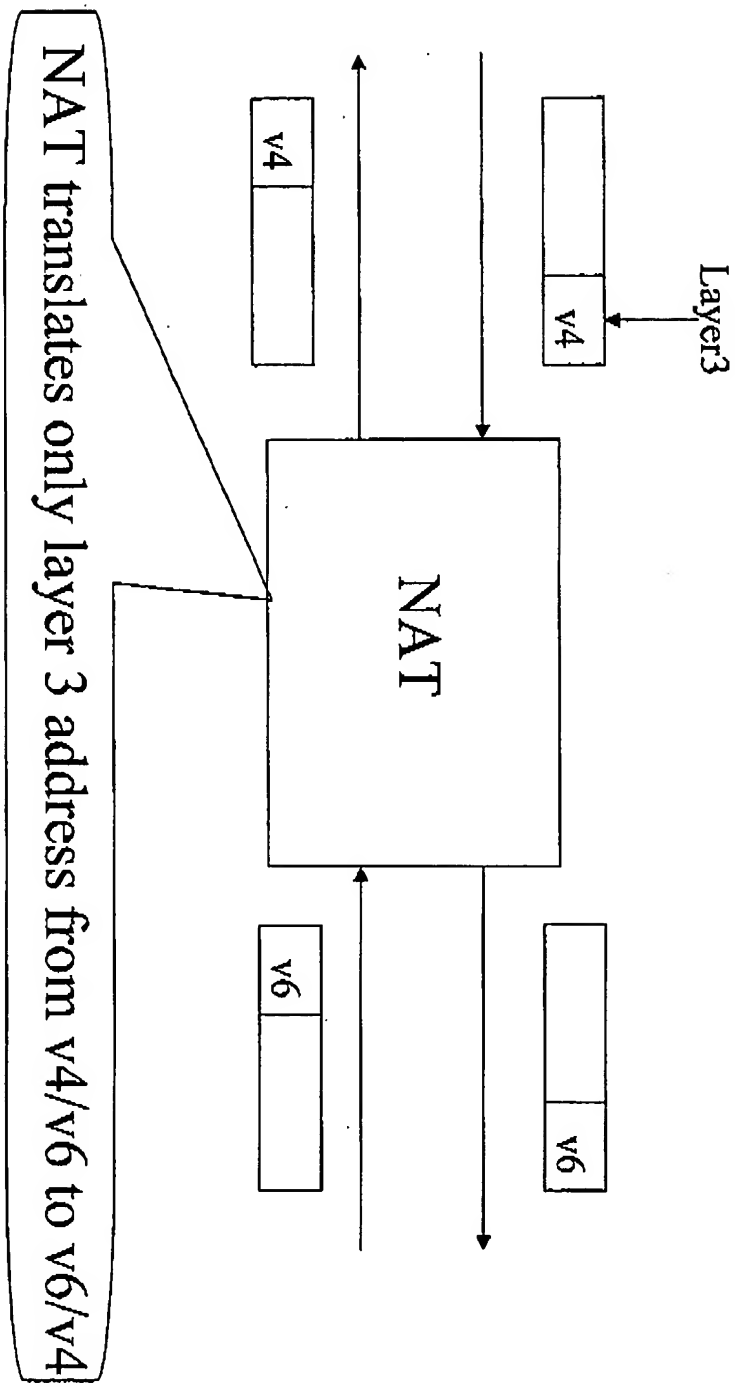
wherein said server device translates an address of a predetermine portion, the address of which has not been translated by said address translator.

17. A server device according to claim 16, wherein said server device translates an address using translation information stored in said address translator.

18. A server device according to claim 17, wherein said translation information is an address translation rule between the protocol P and the protocol Q.

19. A server device according to claim 18, wherein said translation information further includes information for specifying said predetermined portion.

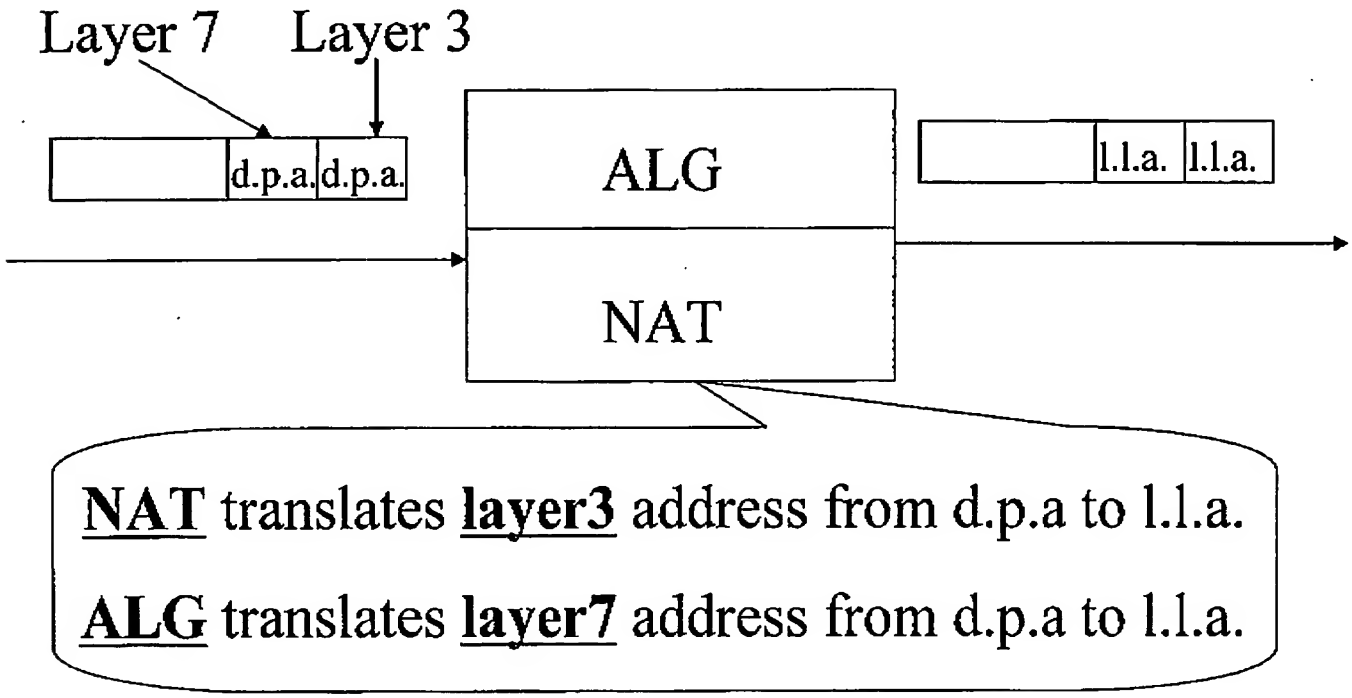
Tsuchiya


NAT translates only layer 3 address from v4/v6 to v6/v4
NAT
v4
v4
Layer3
v6
v6

Dorenbosch

d.p.a.: dynamic public address

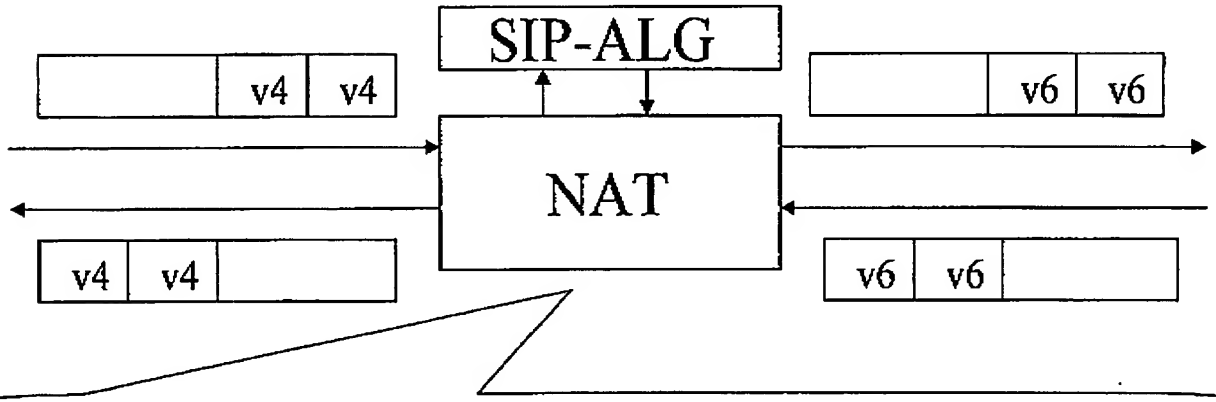
l.l.a: long lived IP address



Session Dependent

Different point #1

Our invention



1)**NAT detects SIP message by dst. address, src. address, output port, input port or combination of them.**

2)NAT send SIP message to SIP-ALG with translation information.

3)SIP-ALG translates layer7 address from v4/v6 to v6/v4.

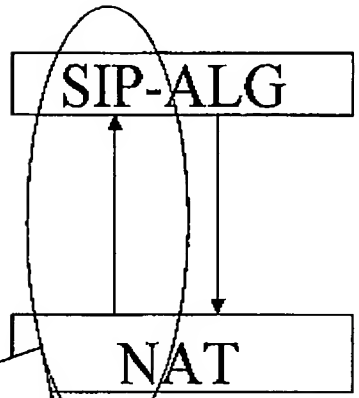
4)NAT translates layer3 address from v4/v6 to v6/v4.

"port" is an identifier of an application (ex. http, ftp, e-mail, SIP).

Dorenbosch doesn't disclose about "***how to detect SIP message***".

.....send all packets to ALG or not ?

Different point #2



1) **NAT adds a tag on a portion to be translated.**
2) NAT sends SIP message with the tag to SIP-ALG.
3) **SIP-ALG finds the portion to be translated by the tag.**
4) SIP-ALG translates layer7 address of the portion from v4/v6 to v6/v4.

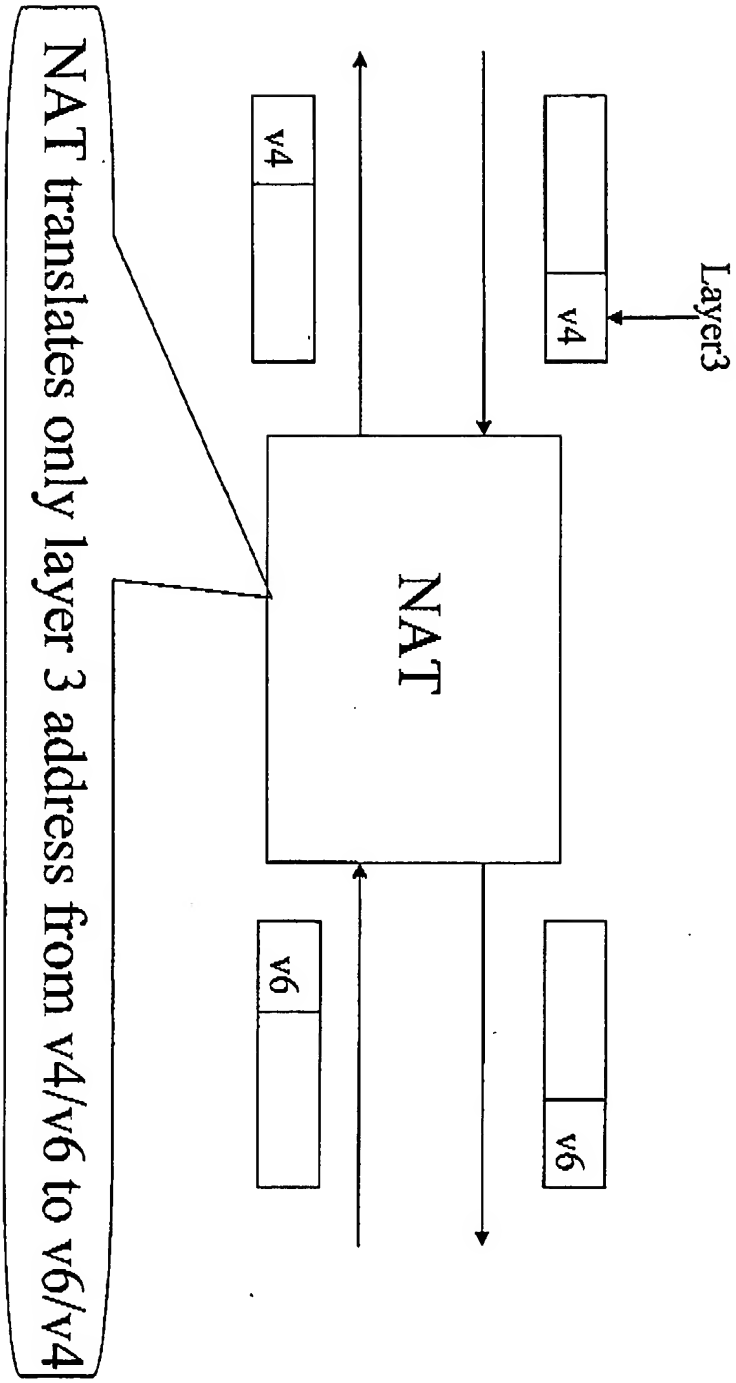
Dorenbosch doesn't disclose about "***tag***".

Different point #3

Tsuchiya	Layer3 v4 ⟷	Layer3 v6
Dorenbosch	Layer7 d.p.a. Layer3 d.p.a.	→ Layer7 l.l.a. Layer3 l.l.a.
Our invention	Layer7 v4 → Layer3 v4 ←	Layer7 v6 Layer3 v6

Both of references don't disclose about translating "**layer7**" address for "**two ways**".

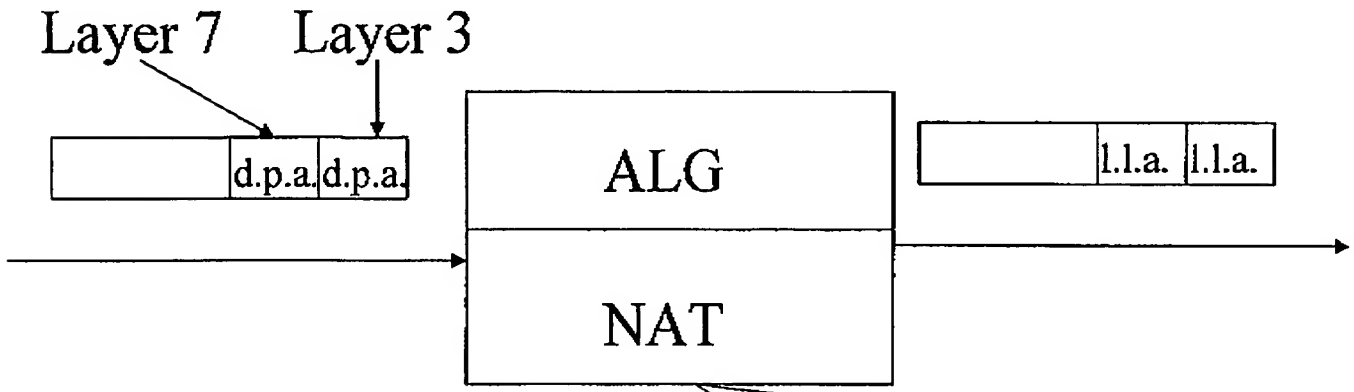
Tsuchiya


NAT translates only layer 3 address from v4/v6 to v6/v4
NAT
v4
v4
Layer3
v6
v6

Dorenbosch

d.p.a.: dynamic public address

l.l.a: long lived IP address

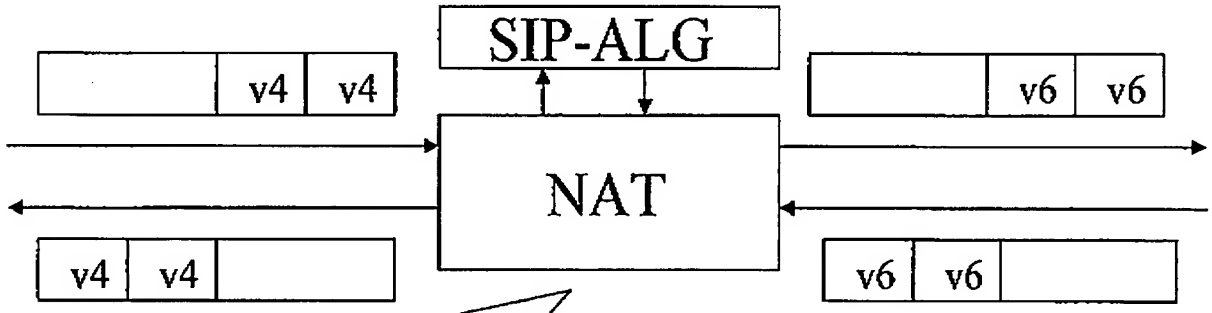


NAT translates **layer3** address from d.p.a to l.l.a.

ALG translates **layer7** address from d.p.a to l.l.a.

Different point #1

Our invention



1)**NAT detects SIP message by dst. address, src. address, output port, input port or combination of them.**

2)NAT send SIP message to SIP-ALG with translation information.

3)SIP-ALG translates layer7 address from v4/v6 to v6/v4.

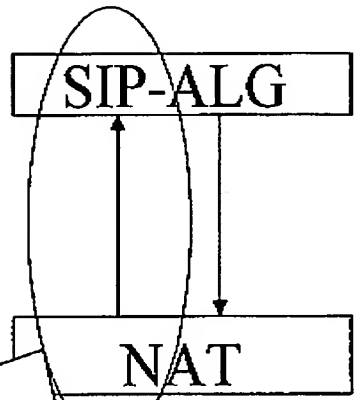
4)NAT translates layer3 address from v4/v6 to v6/v4.

"port" is an identifier of an application (ex. http, ftp, e-mail, SIP).

Dorenbosch doesn't disclose about "***how to detect SIP message***".

.....send all packets to ALG or not ?

Different point #2



1) **NAT adds a tag on a portion to be translated.**
2) NAT sends SIP message with the tag to SIP-ALG.
3) **SIP-ALG finds the portion to be translated by the tag.**
4) SIP-ALG translates layer7 address of the portion from v4/v6 to v6/v4.

Dorenbosch doesn't disclose about "***tag***".

Different point #3

Tsuchiya	Layer3 v4 ⇄	Layer3 v6
Dorenbosch	Layer7 d.p.a. Layer3 d.p.a.	→ Layer7 l.l.a. Layer3 l.l.a.
Our invention	Layer7 v4 → Layer3 v4 ←	Layer7 v6 Layer3 v6

Both of references don't disclose about translating "**layer7**" address for "**two ways**".